**Conclusion:** Our results demonstrate that miR-30a-5p can sensitize BC cells to cisplatin via suppressing ATG5 and BECN1 expression, therefore, increasing miR-30a-5p level in BC represents a novel strategy to enhance the efficacy of cisplatin therapy during cancer treatment.

**PD2-4:**
**CHRONIC KIDNEY DISEASE IS ASSOCIATED WITH UPPER TRACT UROTHELIAL CARCINOMA – A NATIONWIDE POPULATION-BASED COHORT STUDY IN TAIWAN**

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**Purpose:** Increased urinary tract malignancy has been reported in end-stage renal disease (ESRD). However, little is known about chronic kidney disease (CKD). This study is designed to explore the association between CKD and upper tract urothelial carcinoma (UTUC).
**Materials and Methods:** Using Taiwan's Longitudinal Health Insurance Database, we studied CKD patients between January 2000 and December 2011. The non-CKD controls were selected at a ratio of 4:1 and frequency matched by gender, age group and index date. We used Chi-square test and t-test to analyze the sociodemographic information and comorbidities. Cox regression analysis was used to calculate the hazard ratio (HR) and 95% confidence interval (CI).
**Results:** The selected cases included 45,321 CKD cases and 181,284 controls. A significantly higher incidence of UTUC was noted in the CKD group (0.22% vs. 0.07%, $p < 0.001$). In univariate analysis, CKD, female gender, age, hypertension, hematuria, repeated urinary tract infection, bladder cancer and ESRD were all associated with UTUC. In multivariate analysis, only CKD, female gender, age, hematuria, bladder cancer and ESRD were significantly associated. The HR for CKD was 1.63 (95% CI: 1.26–2.13). Females had a higher HR of 1.38 (95% CI: 1.11–1.71). After excluding those patients who progressed to dialysis or kidney transplantation, the risk for CKD was still high, with a HR of 1.72 (95% CI: 1.33–2.33).
**Conclusion:** CKD is a significant factor associated with UTUC. We should pay attention to the possibility of UTUC for CKD patients before they progress to ESRD.

**PD2-5:**
**TUMOR CONTACT SURFACE AREA IS ASSOCIATED WITH VOLUME LOSS AND FUNCTIONAL DECLINE AFTER PARTIAL NEPHRECTOMY**

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**Purpose:** We propose a formula of calculate-based contact surface area (CSA). We examined the correlation of contact surface area and renal volume loss and the predictability for renal function after partial nephrectomy.
**Materials and Methods:** We conducted a retrospective study in patients who underwent partial nephrectomy between January 2012 and December 2014. Based on abdominopelvic CT and MRI, we calculated the contact surface area with the formula "2* $\pi$ *Radius*Depth"; while resected and ischemic volume (RAIV) was determined by the equation" [2w^2+3w(r+d)+6rd]*w*$\pi$)/3". We evaluated the correlation between CSA, RAIV and perioperative parameters. And we comparatively analyzed the ability of CSA and RAIV to predict the reduction in renal function.
**Results:** There were 35, 26, and 45 patients receiving OPN, LPN, RPN respectively. The mean±SD contact surface area was 30.7±26.1 $cm^2$, and and the mean±SD RAIV was 19.1±14.4 $cm^3$. On Spearman correlation analysis we found that CSA and RAIV were highly correlated (coefficient: 0.99, $p < 0.001$). In univariate analysis, BMI ($p = 0.02$), EBL ($p = 0.001$), RAIV ($p < 0.001$), and CSA ($p < 0.001$) significantly affected postoperative renal function. In ROC curve analysis, both CSA and RAIV have good ability to predict more than 10% change of estimated glomerular filtration rate (AUC: 0.86 vs. 0.87). There is no significant difference in AUC between CSA and RAIV. The area difference in PCE10 was 0.002 ($p = 0.51$).
**Conclusion:** In our study, CSA and RAIV were correlated with several perioperative outcomes and affected post-operative renal function. The ability to predict post-operative renal function between CSA and RAIV was nearly identical. Since CSA was simpler to use, and may possess less interobserver variability in comparison with RAIV, we believe that CSA can represent renal parenchymal loss.

**PD2-6:**
**THE IMPACT OF METHYLTHIOADENOSINE PHOSPHORYLASE (MTAP) DEFICIENCY IN PATIENTS WITH UPPER TRACT UROTHELIAL CARCINOMA**

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**Purpose:** Urothelial carcinomas (UCs) involve recurrent chromosome 9p deletions. Methylthioadenosine phosphorylase *(MTAP)* on 9p21.3is a proposed functional tumor suppressor gene. The role of MTAP in upper tract UC (UTUC) is unknown. We aimed to investigate MTAP's association with disease characteristics and oncologic outcomes in UTUC patients undergoing radical nephroureterectomy (RNU).
**Materials and Methods:** Using immunohistochemistry, we investigated MTAP expression in 340 UTUC patients treated with RNU from1996–2004, and correlated it with clinicopathologic characteristics and clinical outcomes. Univariate and multivariate Cox regression analyses evaluated the association of MTAP expression with disease-specific survival (DSS) and metastasis-free survival (MeFS).
**Results:** MTAP was deficient in 119 (35.0%) patients. MTAP deficiency was significantly associated with higher pathologic stage ($p < 0.001$), lymph node metastasis ($p < 0.001$), high grade ($p = 0.008$), vascular invasion ($p = 0.001$), perineural invasion ($p = 0.001$), and higher mitotic rate ($p = 0.016$).Sixty (17.6%) patients died of UTUC and 70 (20.6%) developed metastasis. MTAP-deficient patients demonstrated significantly worse DSS (58.1% vs.89.3%; $p < 0.0001$) and MeFS (54.7% vs.87.9%; $p < 0.0001$) at five years than those with intact expression. MTAP deficiency was independently associated with cancer-specific mortality (hazard ratio [HR]:2.213, $p = 0.019$; 95% confidence interval [CI]:1.141–4.293) and metastasis development (HR:2.867, $p < 0.001$; 95% CI:1.601–5.106).
**Conclusion:** MTAP deficiency is associated with aggressive cancer phenotype and unfavorable oncologic outcomes, suggesting it may be a new biomarker and provide additional prognostic information in UTUC patients undergoing RNU.

## *Podium-3*
## *Oncology*

**PD3-1:**
**TPPP GENE ALTERATIONS AND ITS ROLE IN BLADDER CANCER**

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